

INSTALLATION MANUAL

MODEL: CCL-WBC-TOUCH-32



WALLBOX TOUCH SERIES



CIRCONTROL
Mobility & eMobility

Wallbox Touch Series – Installation manual

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1 PREFACE

THE FOLLOWING SYMBOLS ARE USED FOR IMPORTANT SAFETY INFORMATION IN THIS DOCUMENT



ELECTRIC RISK!

Take precautions to make the electrical connection inside the unit.

Unit must be disconnected from any power source during commissioning.



ATTENTION!

Indicates that the damage to property can occur if appropriate precautions are not taken.

This manual provide commissioning information for Wallbox Touch Series, which has been designed and tested to allow electric vehicle charging, specified in IEC 61851.

This document has different sections where describes electrical components inside the charge station and a step-by-step installation procedure.

Certification

- Complies with IEC 61851, Electric vehicle conductive charging system (IEC 61851-1)
- Complies with IEC 62196, Plugs, socket-outlets, vehicle couplers and vehicle inlets -
- Conductive charging system (IEC 62196-1 and IEC 62196-3).
- RFID complies with ISO 14443A

2 INSTALLATION GUIDELINES

2.1 IMPORTANT SAFETY INSTRUCTIONS



Read carefully all the instructions before starting to ensure properly installation of the charge point.

The charge point is designed for installation in indoor and outdoor areas. For each of the different conditions of installation, the unit must be installed safely and ensure adequate protection.

- Charge point must not be installed in areas where there is potential risk of explosions.
- Do not install the charge point where falling objects may damage the equipment.
- Wall surface where the charge point is placed must withstand the mechanical forces.
- Do not use this unit for anything other than electric vehicle charging modes are expected in IEC 61851.
- Do not modify this unit. If modified, CIRCONTROL will reject all responsibility and the warranty will be void.
- Comply strictly with electrical safety regulations according to your country.
- Do not make repairs or manipulations with the unit energised.
- Only trained and qualified personnel should have access to low-voltage electrical parts inside the device.
- Check the installation annually by qualified technician.
- Remove from service any item that has a fault that could be dangerous for users (broken plugs, caps that don't close...).
- Use only Circontrol supplied spare parts.
- Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.

Refer to TECHNICAL DATA section for more information about environment installation conditions.

2.2 ELECTRICAL WIRING CONSIDERATIONS



Before start with the wiring connection of the charge point shall take in consideration this section.

1. Charge point – Input power supply

Charge point does not include elements of electrical protection.

The input power supply line must be hardwired from a distribution board to the charge point under electrical safety regulations according to your country regulations. Minimum safety required protections:

- RCD: Type A. $I_{\Delta N}=0.03A$.
- MCB: maximum value according to the maximum output current of the charge point. Refer to *TECHNICAL DATA* section for further information.

2. Power supply Line dimensioning

The dimensioning of the input power supply line of the charge point must be checked by a qualified electrician. Note that various factors such as cable length between distribution board and charge point, maximum output current of the charge point may have influence of the selected cable.

In such cases, increasing the cable cross-section it is required to adapt the temperature resistance of the power supply line.

3. Charge point – Maximum current output

If the power supply is less than maximum output current of the charge point, and adjustment to a lower nominal current must be performed using the integrated keypad of the charge point. Please refer to *ADDITIONAL SETTINGS* section in order to know how to change this value.

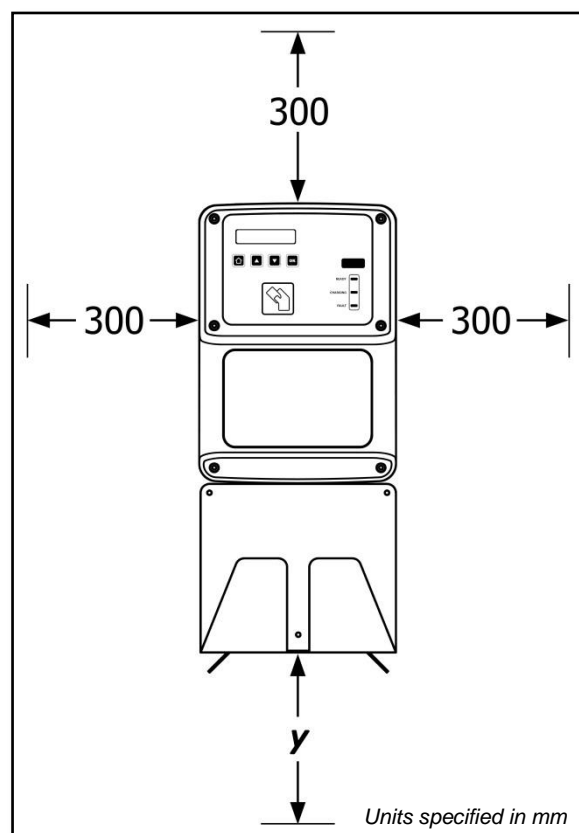
Please refer to the *TECHNICAL DATA* section to consult the default factory settings from maximum output current of the charge point. Depending of the model this value may vary.

2.3 SPACE REQUIREMENTS

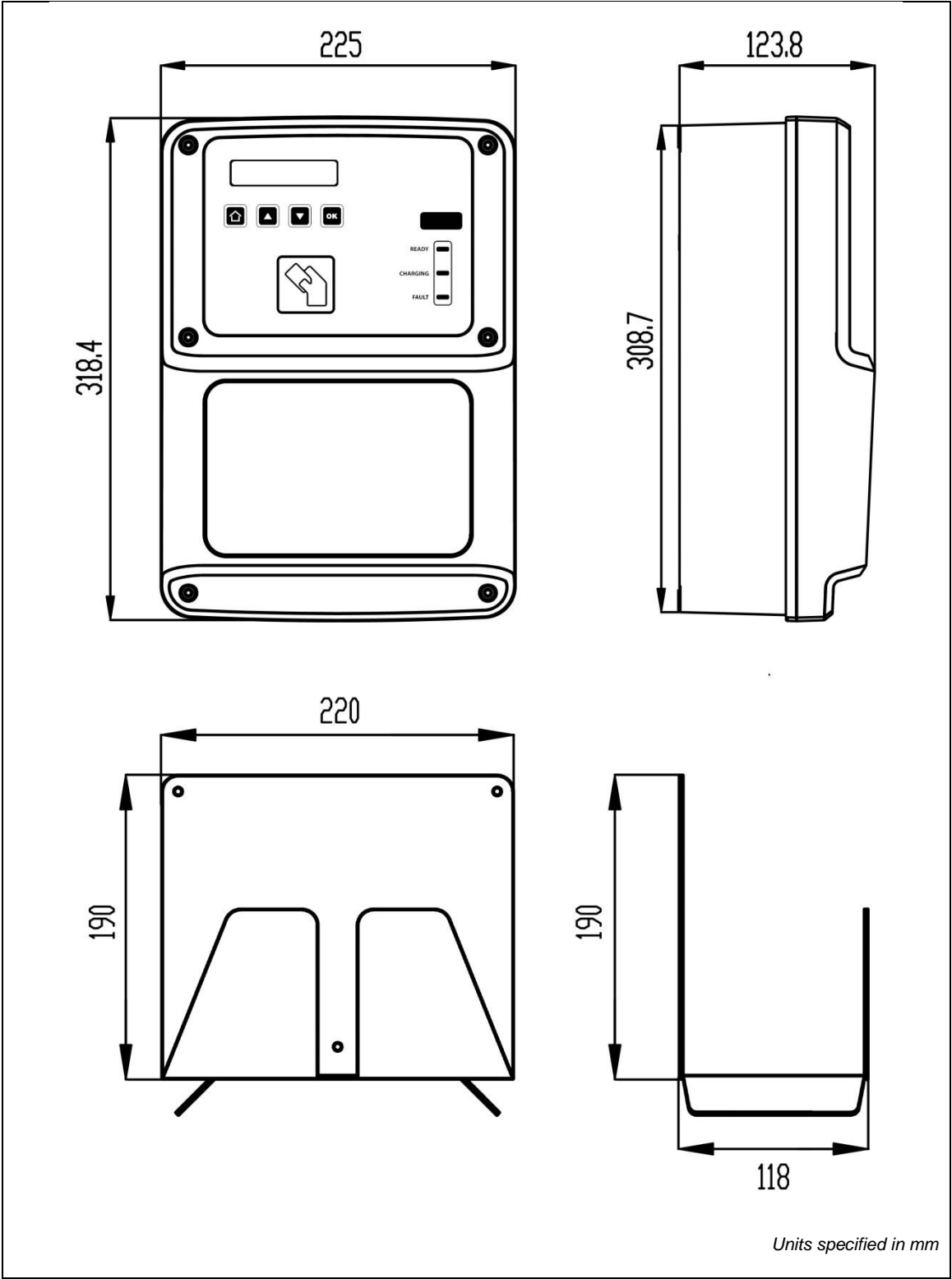
When installing the equipment respect minimum distances space for maintenance and safety reasons.

Cable holder (supplied) must be installed under the charge point. Take into account the required space during the installation.

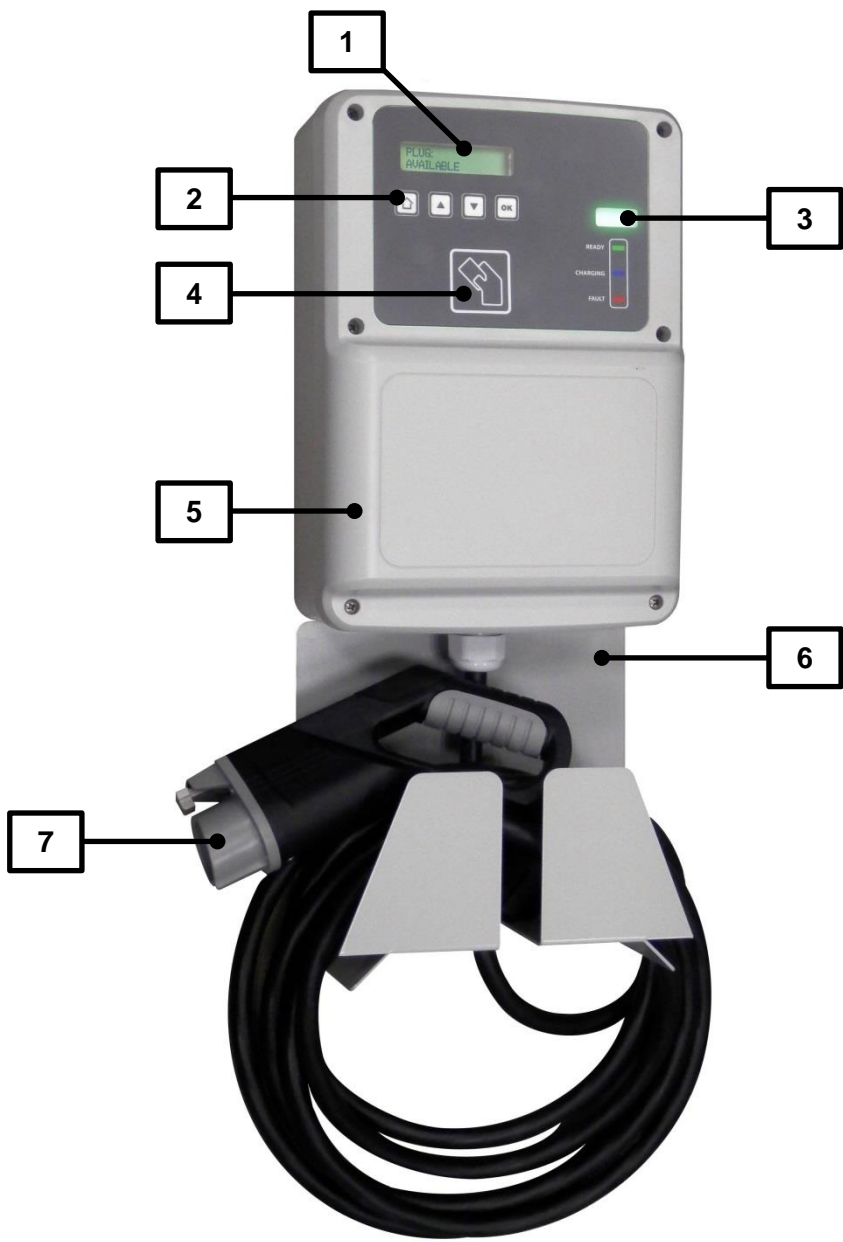
Minimum height **y** recommended is: 1,2m. Please comply accordingly to your country specifications.



3 PRODUCT DIMENSIONS

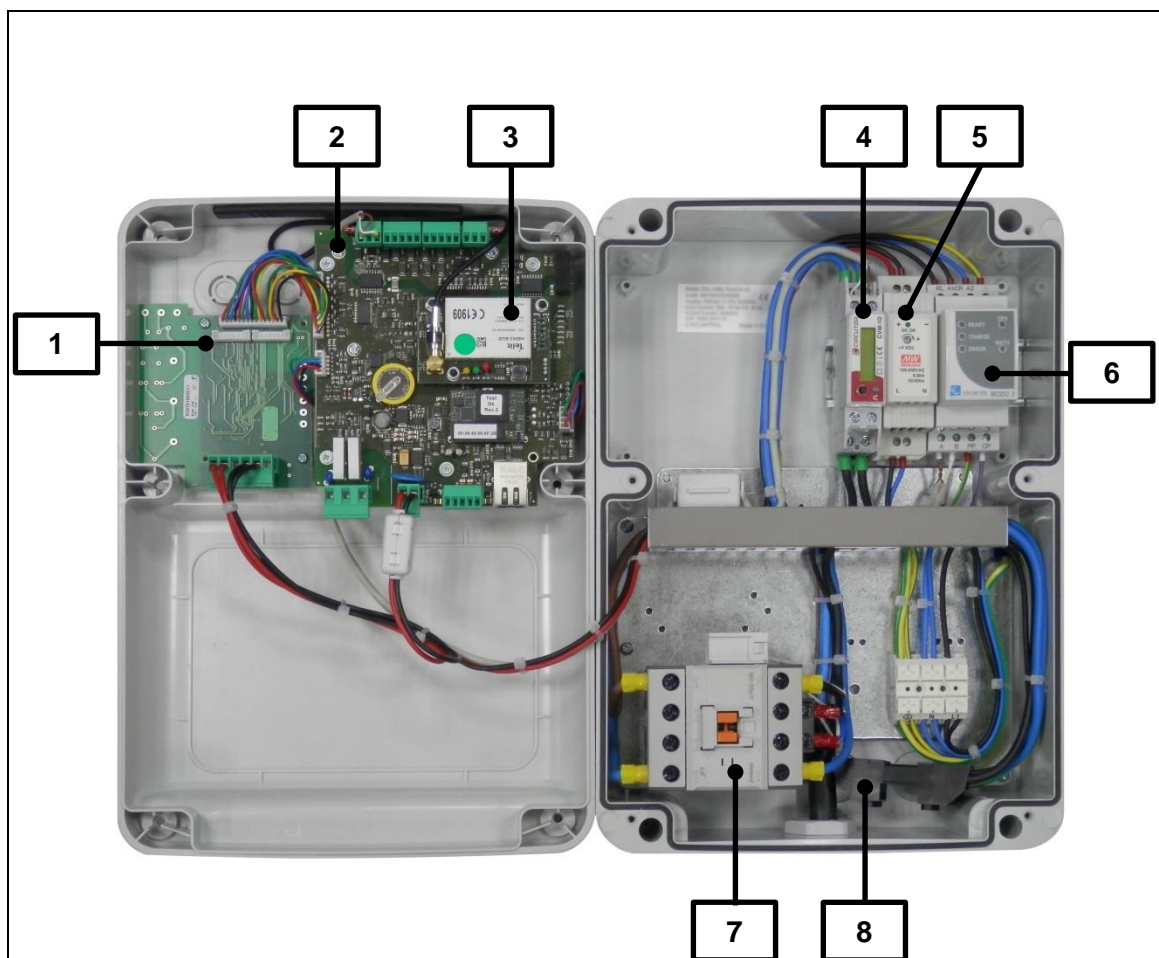


4 PRODUCT OVERVIEW



1. Liquid Cristal Display	2. Keypad	3. Plug status beacon
4. RFID Reader	5. Front cover	6. Cable holder
7. Type 1 tethered cable		

5 COMPONENT PARTS LOCATION



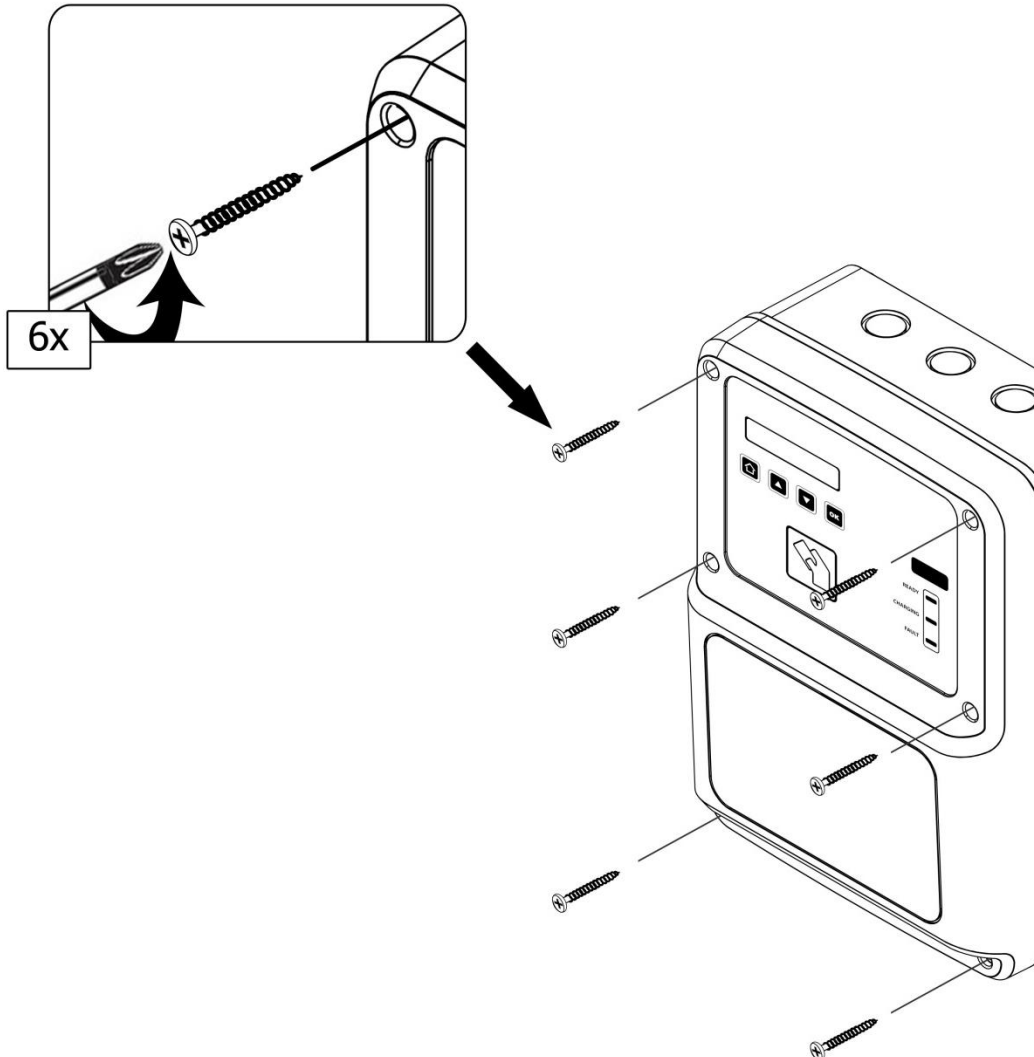
1. Plug – LED beacon	2. CCL1-Mini Device	3. Cellular modem
4. Plug – Meter	5. 12V _{DC} Power Supply	6. Plug – Mode 3
7. Plug – Contactor	8. AC Terminals	

6 INSTALLATION

6.1 SUPPLIED MATERIAL

MATERIAL	Qty
Charge point	1
Cable holder	1
Installation manual	1
Cable gland M25x1.5	1
CirCarLife RFID Mifare card	1

6.2 OPENING THE UNIT

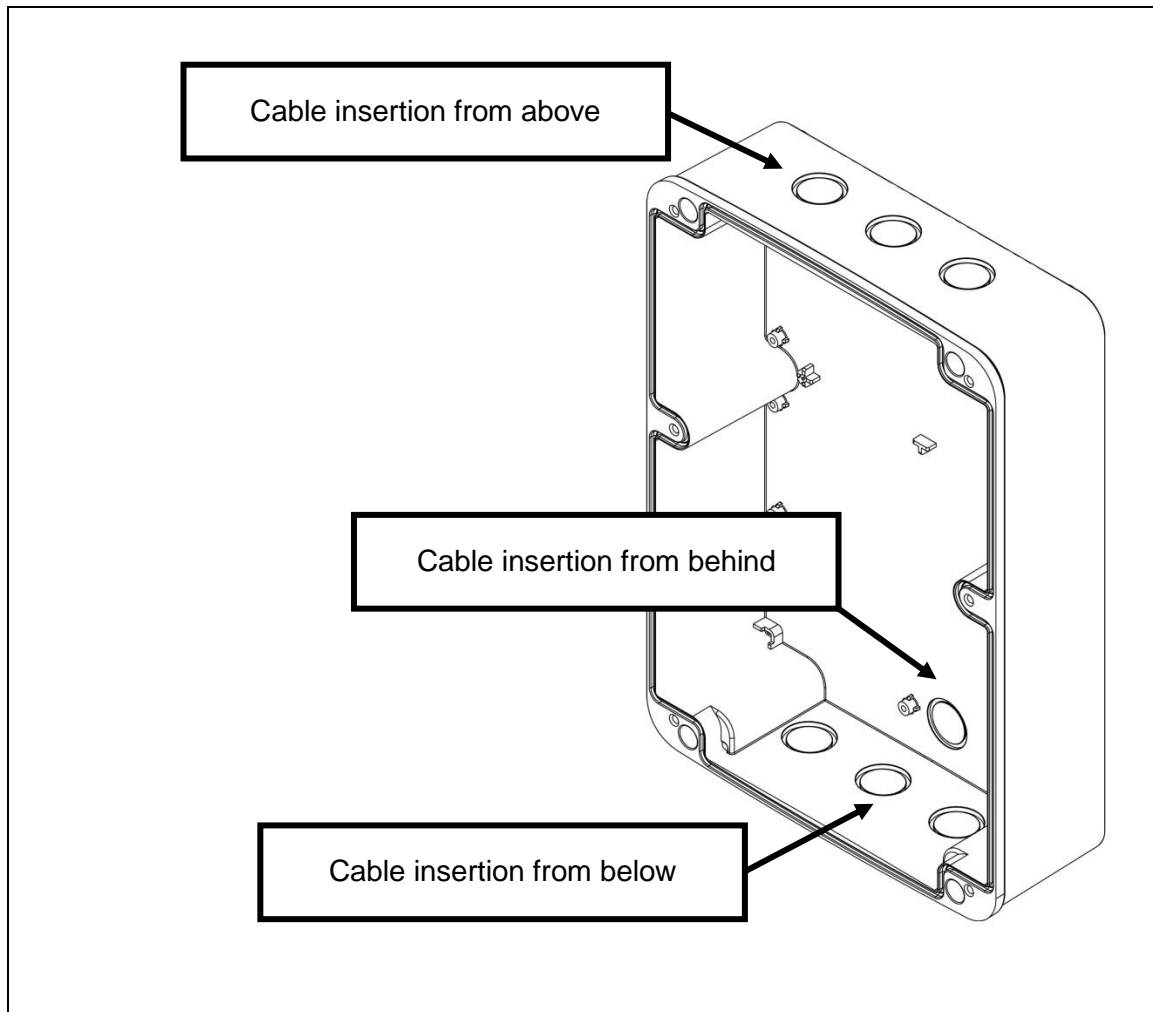
STEP	ACTION
1.	<p>Remove 6 screws from the front cover in order to open the unit:</p>  <p>6x</p> <p>Beware of the cables between cover and base when wall mounted unit is opened during the installation tasks.</p>

6.3 CABLE INSERTION

There are three possibilities to insert the electric wires or electric pipe:

- a) Cable insertion from above.
- b) Cable insertion from behind.
- c) Cable insertion from below.

In all cases it is required to install a cable gland to ensure properly installation.

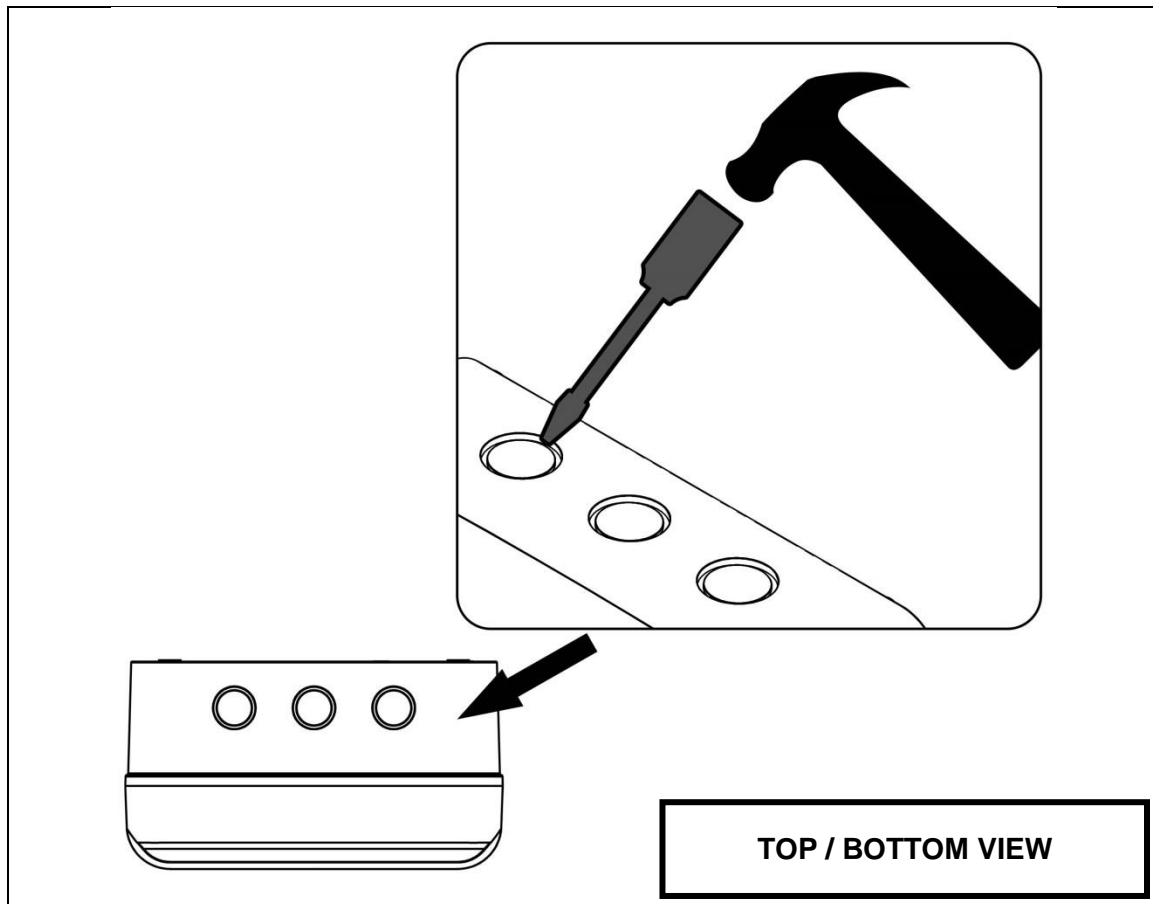


Protect the contactor and all possible electronic devices inside the unit before breaking the cable insertions.

6.3.1 CABLE INSERTION FROM ABOVE / BELOW

There are three insertion openings available at the top and bottom sides of the charge point.

- Before break out the required openings, take into account the space between internal electronic and wires inside the charge point.
- Use a hammer and a flathead screwdriver and carefully break out the cable insertion openings.



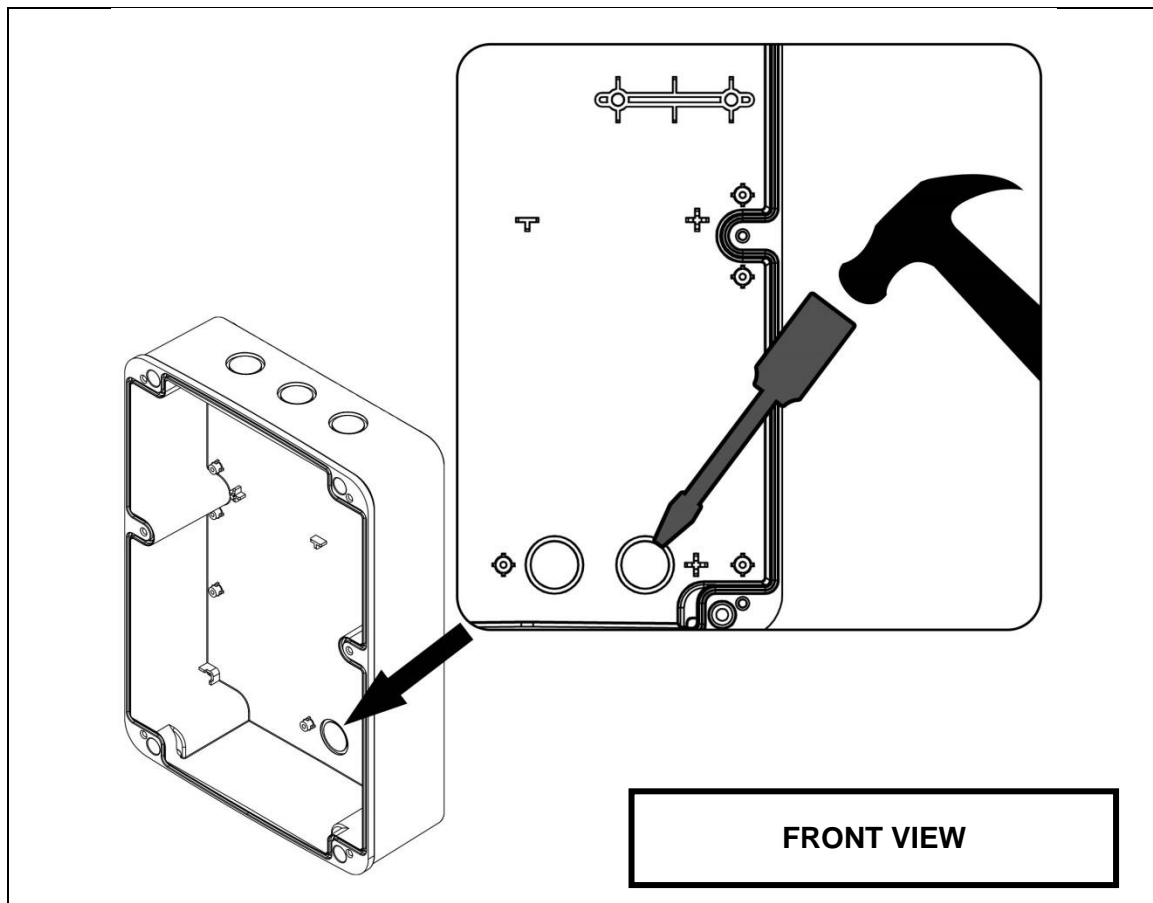
Do not make new holes in others parts of the enclosure. Use only the cable insertion openings to install the required electric pipes.

Install always cable glands to ensure IP protection of the charge point.

6.3.2 CABLE INSERTION FROM BEHIND

There are two insertion openings available at the rear of the charge point.

- Before break out the required openings, take into account the space between internal electronic and wires inside the charge point.
- Use a hammer and a flathead screwdriver and carefully break out the cable insertion openings.



Do not make new holes in others parts of the enclosure. Use only the cable insertion openings to install the required electric pipes.

Install always cable glands or a double membrane seals to ensure IP protection of the charge point.

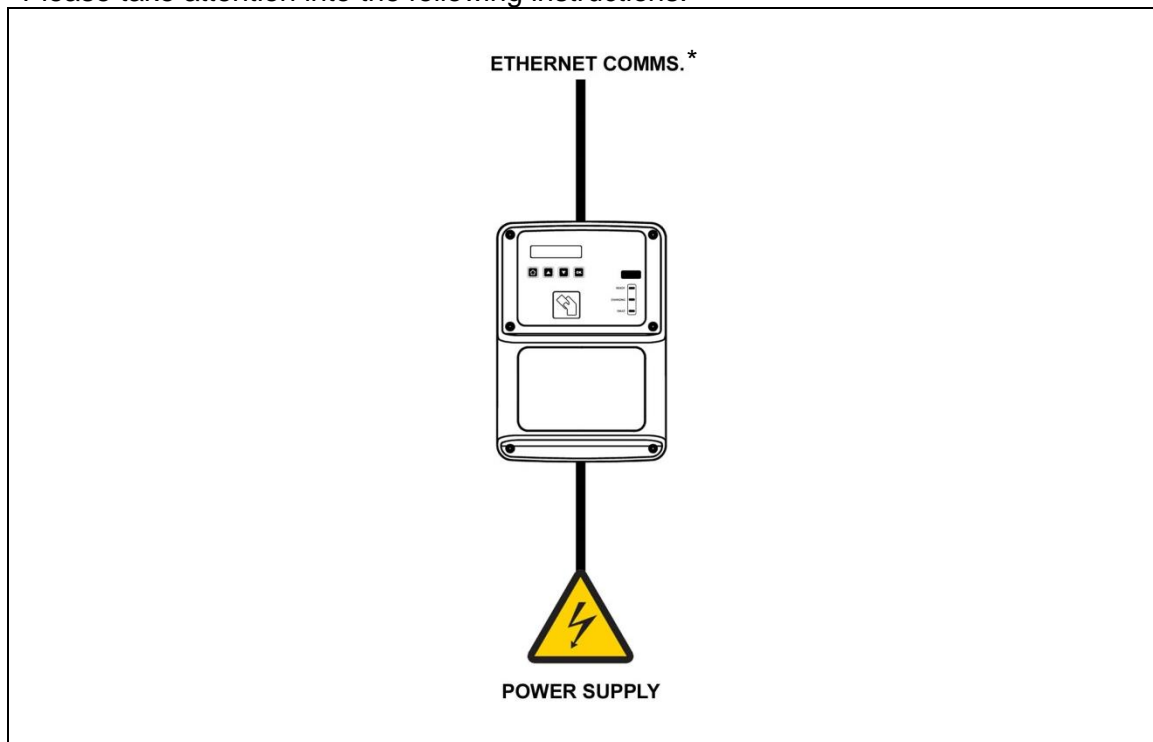
6.3.3 RECOMENDATIONS

Ethernet communications wiring is optional; the unit can operate as standalone.

Please provide communications to the unit if it is required to remote monitoring or use OCPP integration. Use only one of the following interfaces:

- Ethernet communications (all models).
- Integrated 3G modem (only 3G models).

Please take attention into the following instructions:



**Optional*



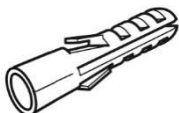

Ethernet communications cable (if necessary) should be introduced at the top of the unit and power supply wires below the unit.

Power wires and communications wires must be installed using different electrical pipes to ensure properly function of the charge point.

6.4 FIXATION PROCEDURE

6.4.1 MATERIAL NEEDED

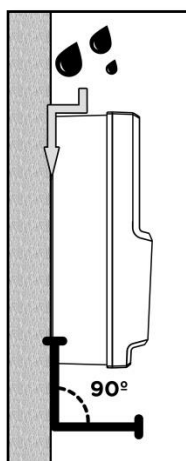
Below list material (**Not included**) is needed to attach the unit to the wall:

MATERIAL	Qty	PICTURE	DIMENSIONS
Wall plug	4		Ø 6
Screws	4		4x45mm




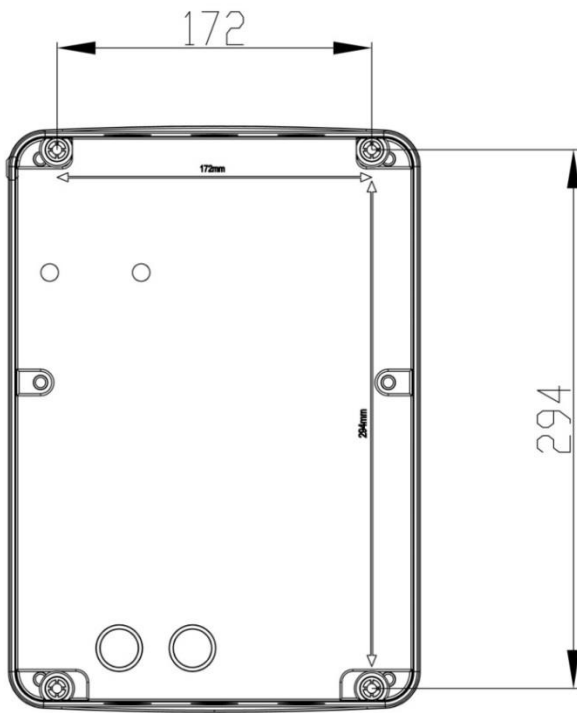
All images shown in the above table are approximate and may vary depending on the surface where the charge point is installed.

6.4.2 CONSIDERATIONS

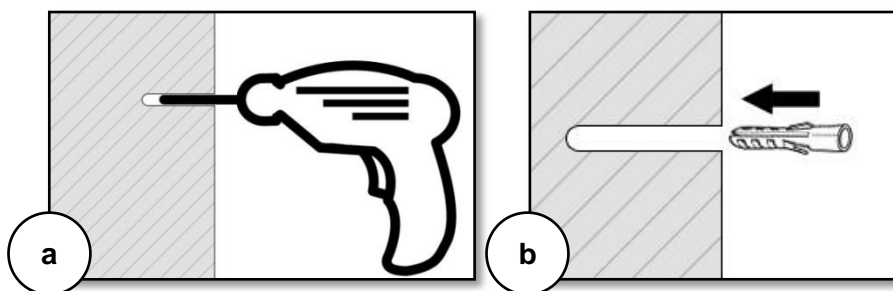


- Water drainage from the top side to the rear side of the unit must be ensured.
- Charge point must be installed vertically.
- Use a flat surface.
- Use a level tool to ensure installation at an angle of 90°.

6.4.3 INSTALLATION

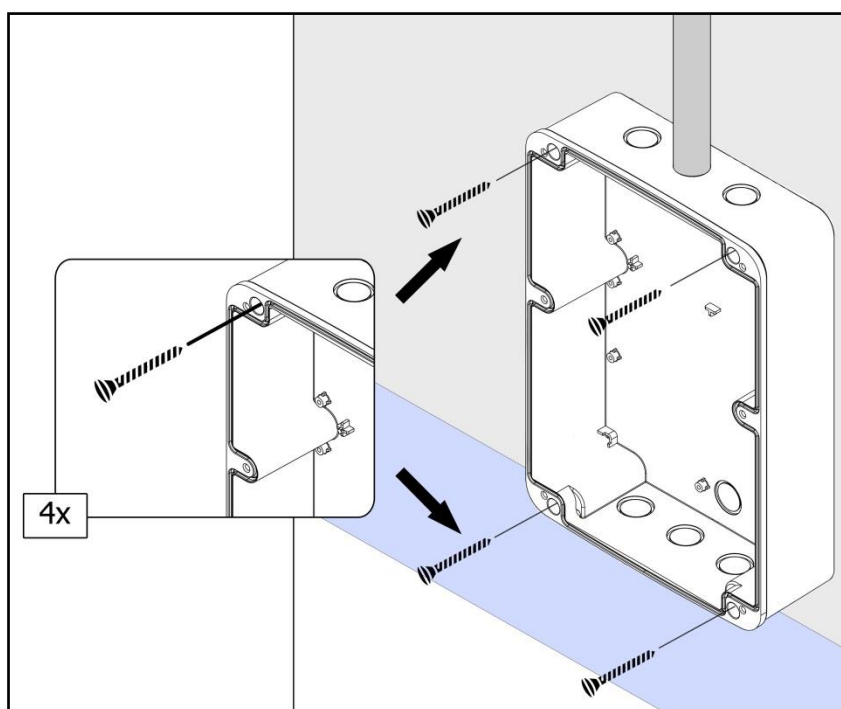
STEP	ACTION
2.	<p>Adjust the position of the charge point according to the correct vision and management for the end user.</p>  <p>Minimum recommended height: 120cm</p> <p>Please comply to your country specifications.</p>
3.	 <p>REAR VIEW</p> <p><i>Units specified in mm</i></p> <ol style="list-style-type: none"> 1. Mark 4 holes taking into account the above measurements. 2. Place it on a flat surface. 3. Use 4x45mm screws to attach the unit to the wall. 4. Check charge point has no inclination using a level tool.

4.



- a) Use $\varnothing 6$ drill size to make the 4 holes into the wall.
- b) Install the anchor according to the surface material.

5.



- Recommended screw dimensions: 4x45mm
- Use only the holes indicated in the picture above to insert and anchor the unit to the wall. Do not make new holes in other parts of the plastic from the unit; otherwise water can enter into the unit when it rains.



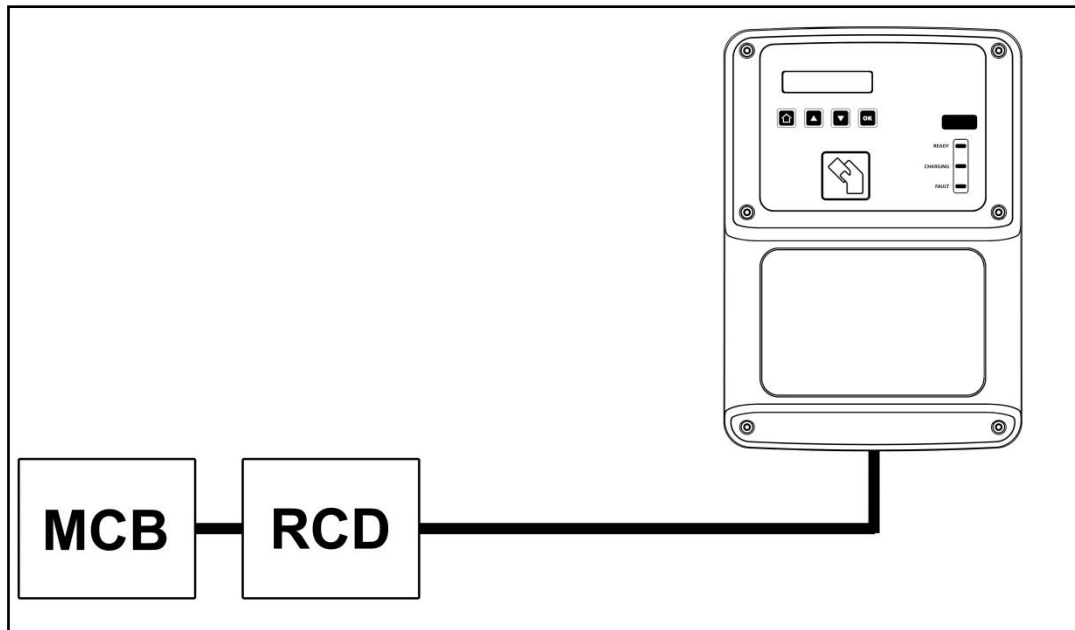
All screws and wall plugs needed to attach the unit to the wall are not included.

6.5 ELECTRICAL INSTALLATION

6.5.1 PROTECTIONS

Charge point does not include elements of electrical protection.

Please provide a Miniature Circuit Breaker (MCB) and a Residual Circuit Breaker (RCD) externally to protect the unit electrically.



Charge point is set to 32A from factory default settings.

Power supply wires should be introduced below of the unit.

Please refer to *ELECTRICAL WIRING CONSIDERATIONS* before proceeding to the wiring installation.

6.5.2 WIRING



SINGLE-PHASE WIRING

- Perform the **230V AC Single-phase** connection as shown.
- Do not forget to connect the ground cable (PE) to the supply terminal.



6.6 SIM CARD (FOR 3G MODELS)

Please, follow bellow procedure to insert SIM card in CCL1Mini embedded modem.

STEP	ACTION
6.	<p>Locate Control module CCL1Mini. Cellular modem is installed in the same CCL1Mini board as shown:</p> 
7.	<p>SIM card holder is located at the left side cellular modem. See image below:</p> 

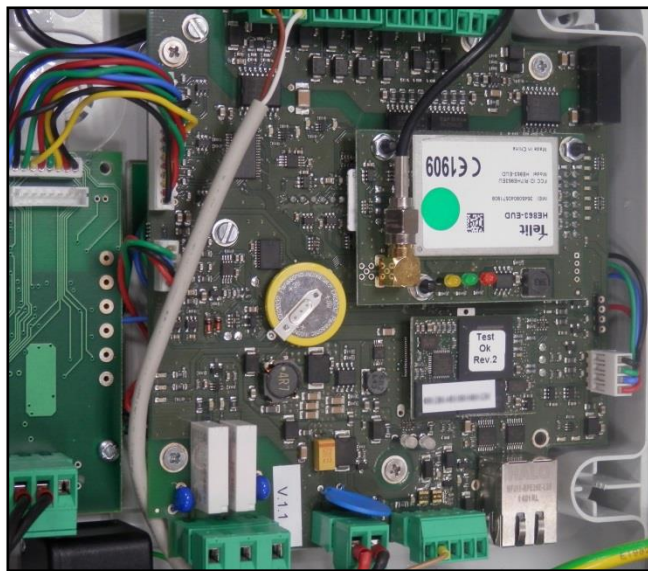
The SIM card and its contacts can be easily damaged by scratches or bending, so be careful when handling, inserting or removing the card.

Insert the SIM card with the contact surface facing down.



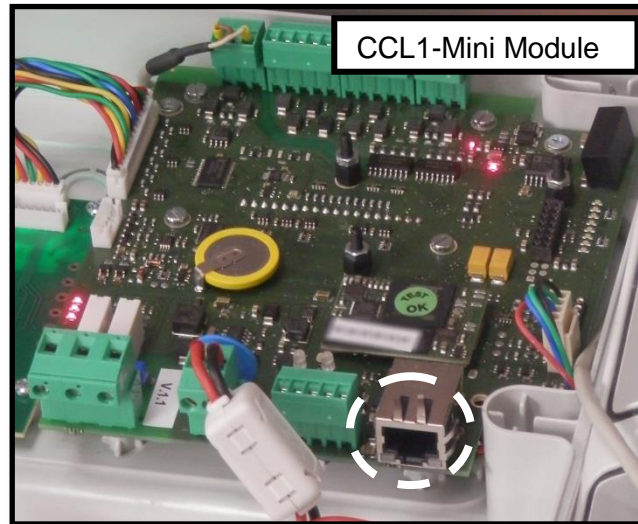
8.

The image below shows how it should be done.



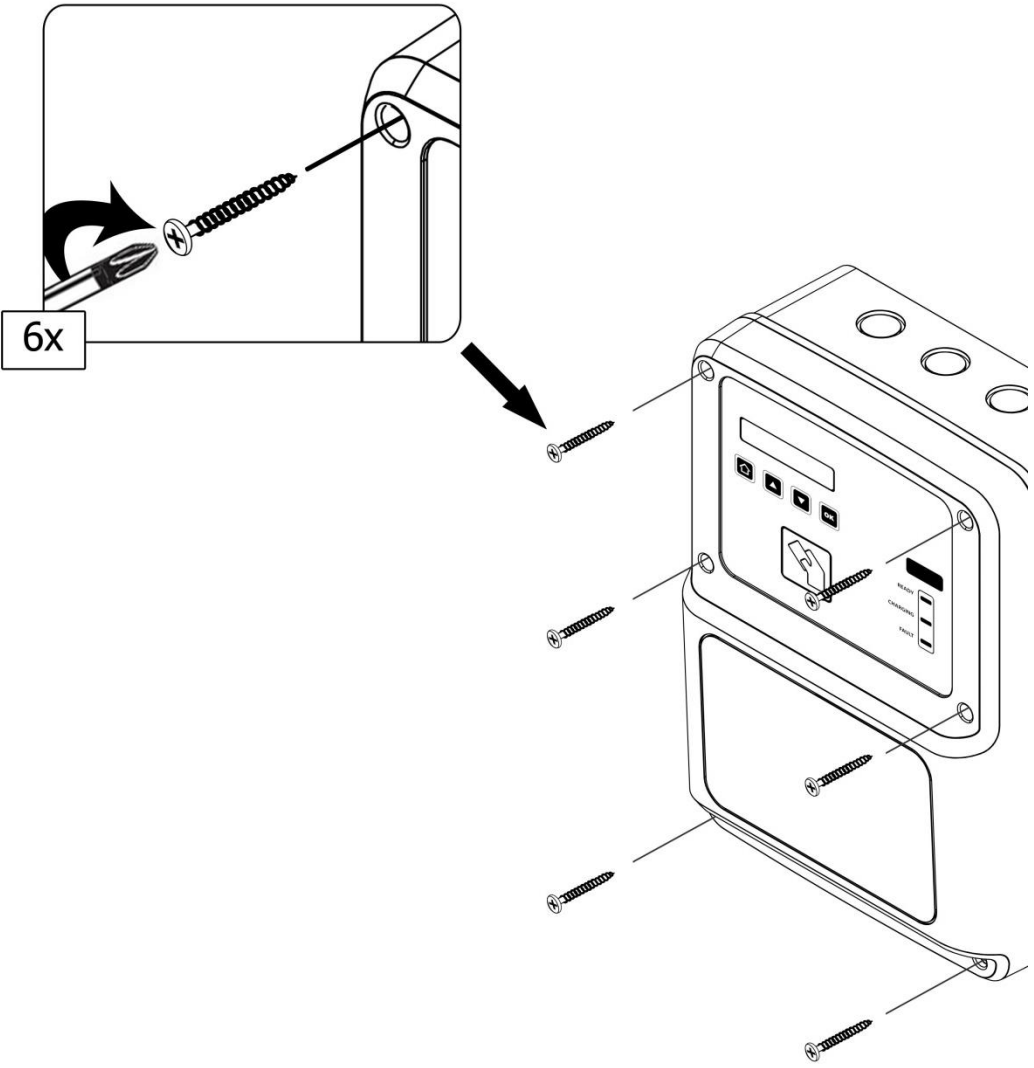
6.7 ETHERNET CONNECTION

Charge station can be configured and monitorized to establish owner preferences or specific setup using integrated Ethernet communication port installed at the bottom of the CCL1Mini module.



This unit is shipped from the factory with default network setting of “*DHCP enabled*”. It means that the charge station will try to obtain an IP address automatically from the network (if it is available).

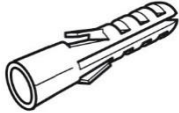

6.8 CLOSING THE UNIT

STEP	ACTION
9.	<p>Place back 6 screws from the front cover in order to close the unit:</p>  <p>6x</p> <p>! Beware of the cables between cover and base while closing the unit.</p>

7 CABLE HOLDER INSTALLATION

7.1.1 MATERIAL NEEDED

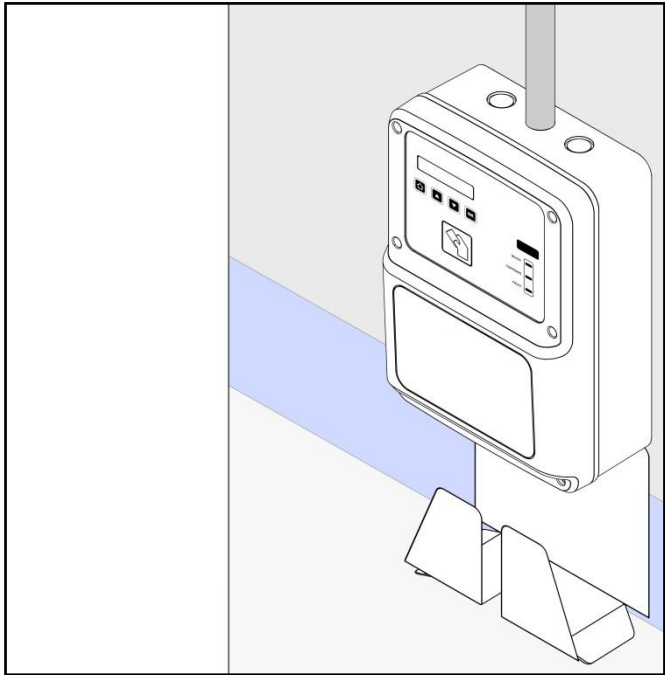
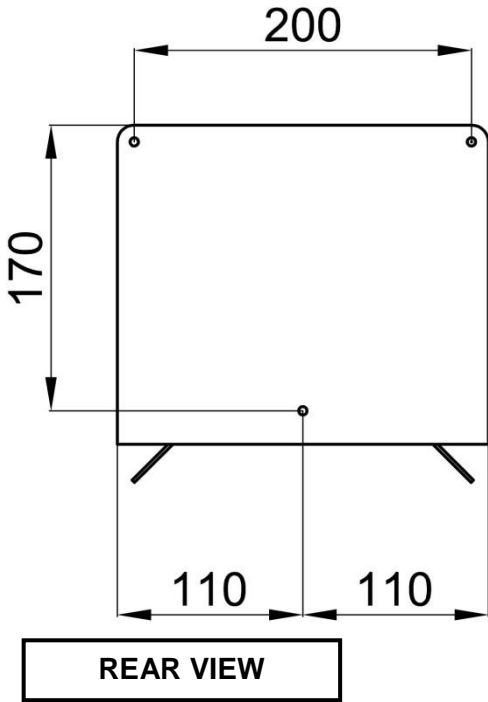
Below list material (**Not included**) is needed to attach the unit to the wall:

MATERIAL	Qty	PICTURE	DIMENSIONS
Wall plug	3		Ø 6
Screws	3		4x45mm

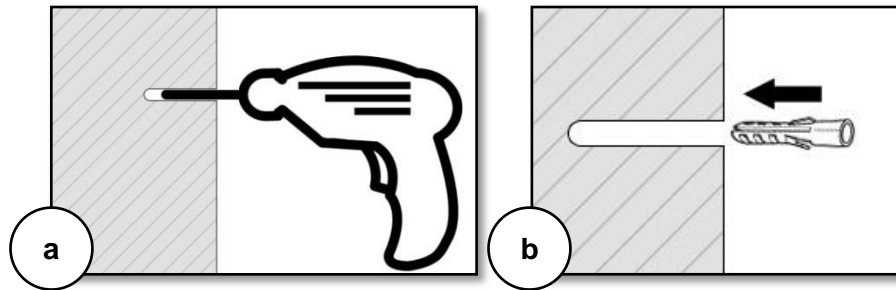


All images shown in the above table are approximate and may vary depending on the surface where the cable holder is installed.

7.1.2 INSTALLATION

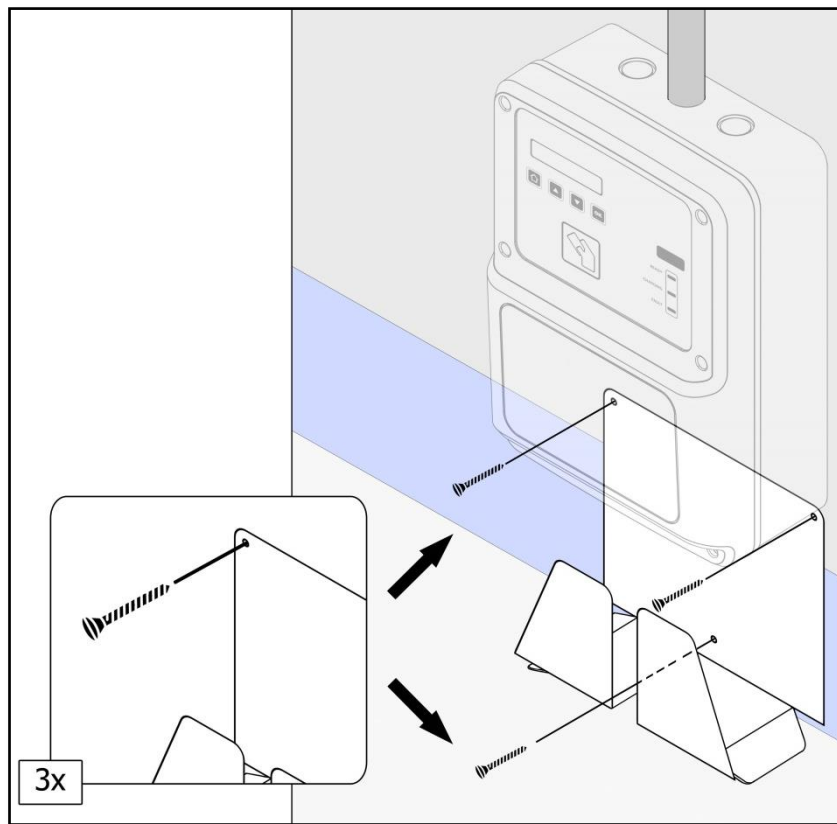
STEP	ACTION
10.	<p>Adjust the position of the cable holder under the charge point as shown below:</p> 
11.	<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  <p style="text-align: center;">REAR VIEW</p> </div> <div style="flex: 1; padding-left: 20px;"> <ol style="list-style-type: none"> 1. Mark 3 holes taking into account the above measurements. 2. Place it on a flat surface under the charge point. 3. Use 4x45mm screws to attach the holder to the wall. 4. Check the holder has no inclination using a level tool. </div> </div> <p style="text-align: center; margin-top: 10px;"><i>Units specified in mm</i></p>

12.



- a) Use $\varnothing 6$ drill size to make the 3 holes into the wall.
- b) Install the anchor according to the surface material.

13.



- Recommended screw dimensions: 4x45mm



All screws and wall plugs needed to attach the holder to the wall are not included.

8 UNIT VERIFICATION

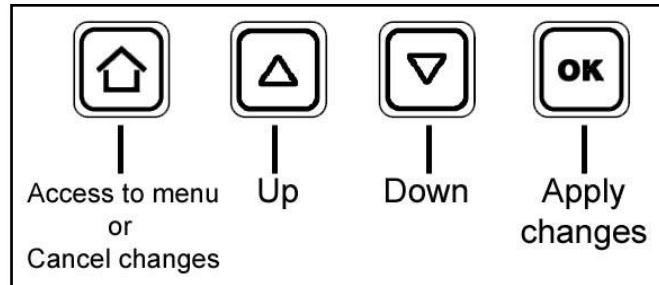
Once all installation procedure has been performed, check points below:

1. Be careful when closing the cover all wires remain within the unit.
2. Check each plug is in proper conditions before start operation.
3. Check no abnormal noise appears while unit is charging.
4. Check all beacons indicators are lighting. Below table shows possible LED beacon colors:

PLUG STATE	BEACON COLOR
Available	Green
Charging	Blue
Fault	Red

9 ADDITIONAL SETTINGS

WallBox Touch series are equipped with a keypad to access to the settings menu in order to configure easily the charge point.



Firmware version *

CCL1-M 2.0

**Firmware version is displayed during power up of the unit.*








9.1 PROGRAMMING MASTER TAG

There is no restriction to access to the settings menu by default factory settings.


Master Tag is an optionally function to restrict the access to the settings menu in order to avoid configuration changes.

9.1.1 ADD/DELETE A NEW MASTER TAG



Only one RFID card can be added as a Master Tag.

1. Press  button to access to the menu.
2. Use  or  until finding Setup option.
3. Press  button.
4. Use  or  buttons until finding Master tag option.
5. Press  button.
6. Only one of the following options is shown:


6.a. Add a new Master Tag: set one RFID card as a Master Tag.

- 6.a.1. Wait until "Show card to the reader" is shown by display.
- 6.a.2. Show the new Master Tag to the reader
- 6.a.3. Press  button to apply changes.
- 6.a.4. If the procedure has been successfully applied display shows "Master tag saved".
- 6.a.5. The Master Tag is now programmed. Keep this card in a safe place.

6.b. Delete Master Tag: delete the current Master Tag configured.





- 6.b.1. Press  button to delete the Master Tag.
 - 6.b.2. If the procedure has been successfully applied display shows "Master tag deleted".
 - 6.b.3. No Master Tag is now programmed. There are no restrictions to enter into the settings menu.
7. Press 3 times  button to save settings and exit.

NOTE

Charge point only asks for the Master tag every time the  button is pressed to enter to the settings menu (only if Master Tag has been configured previously).

9.1.2 RESET MASTER TAG








Follow the procedure below if the Master Tag is lost or stolen:






1. Power OFF the charge point.
2. Power ON back again.
3. Wait until the LED lights back again.
4. Press  and  simultaneously until display shows: "Press OK to reset Master Tag". If the message does not appears, please go back to step number 1 and try again.
5. Press  to delete the Master Tag.
 - a. Press  button If "Master Tag deleted" is shown by display.
6. Now the Master Tag is deleted from the charge point. You can program a new Master Tag or allow free access to the settings menu.

9.2 DISPLAY LANGUAGE

The display messages of the charge point are available in different languages.















Follow procedure below to change the language according to the preferred language:

1. Press  button to access to the menu.
2. If one Master Tag has added before, display shows "Show Master Tag to the reader". Show Master Tag to access to the settings menu.
3. Use  or  buttons until finding Setup option.
4. Press  button.
5. Use  or  buttons until finding Language option.
6. Press  button.

7. Use  or  buttons until finding desired language.
8. Press  button to accept or  button to cancel.
9. Press 3 times  button to exit and save settings.
10. Wait 1 minute approximately until the charge point has completely rebooted.














9.3 CHANGE MAX. CURRENT OF SOCKET

If the power supply is less than the maximum output current of the charge point, use the following procedure to set a lower current rating:

1. Press  button to access to the menu.
2. If one Master Tag has added before, display shows "Show Master Tag to the reader". Show Master Tag to access to the settings menu.
3. Use  or  buttons until finding Setup option.
4. Press  button.
5. Use  or  buttons until finding Max. Intensity of socket option.
6. Press  button twice.
7. Use  or  buttons to change the tens.
8. Press  button.
9. Use  or  to change the units.
10. Press  button.
11. Press 3 times  button to exit and save settings.

9.4 SET DATE AND TIME


Date and time is set from factory as UTC format (Universal Time Coordinated). It is highly recommended to set the correct date and time according to your time zone.

1. Press  button to access to the menu.
2. If one Master Tag has added before, display shows "Show Master Tag to the reader". Show Master Tag to access to the settings menu.
3. Use  or  until finding Setup option.
4. Press  button.
5. Use  or  buttons until finding Date/Time option.
6. Press  button.
7. Use  or  to change the current value that is flashing on the display and  button to change the next value. To cancel procedure press  button.
8. When the last value is changed, press  button to accept.
9. Press 3 times  button to exit and save settings.

9.5 MENU TABLE

The menu table will help you to understand the menu selections and options available in the Touch series charge points.

Factory settings are shown in Bold.

Press  button to access to the menu. Before making changes, check that no vehicles are charging otherwise the current charge session stops.

Level 1	Level 2	Options	Description
Setup	Master Tag	<ul style="list-style-type: none"> Add New Master Tag Delete Master Tag 	<p>There is no Master Tag configured from factory.</p> <p>Set a Master Tag to restrict access to the menu.</p>
	Max. Intensity of the socket	6 – 32 A	<p>Depending on the model, the maximum intensity of the plug may vary.</p> <p>Please refer to technical data for more information.</p> <p>Optionally you can change increase/decrease the maximum intensity of the socket using the up and down buttons.</p>
	Language	<ul style="list-style-type: none"> Catalan English Finnish French German Italian Norwegian Spanish Swedish 	<p>LCD display language.</p> <p>Change the display messages according to the preferred language.</p>
	Date/Time	-	Date and time of the charge point.

Level 1	Level 2	Options	Description
Totals	Energy Meter	-	Total active energy of meter (kWh).
	Total Time	-	Total usage time (minutes).
Time limit	Status	<ul style="list-style-type: none"> • Enabled • Disabled 	Maximum time limitation. Disabled from default factory settings.
	Time limitation	1 to 99 Minutes	You can set from 1 to 99 minutes. Configurable using up and down buttons.
Prepayment	Status	<ul style="list-style-type: none"> • Enabled • Disabled 	Circontrol prepayment solution embedded in RFID cards.
	Credits	1 to 99 Credits	Prepayment only works with <i>CirCarLife Cards</i> .
	Tariff	0.01 to 99.99 Credits	You can establish your own tariff using the menu. Default: 4 Credits Default: 0,15 credits/kWh
User Management	Registered Users	-	Local white-list. Add/Remove/List all the allowed cards configured in the local white list.
	Remove User	-	By default all cards are allowed to start charging. When one or more cards are added to the list, others cards are not allowed to use the charge point (only listed cards).
	Add User	-	
Timer	Status	<ul style="list-style-type: none"> • Enabled • Disabled 	Timer to delay start charging.
	Start Time	-	Charge transaction can only be stopped by the same card that was used to start charging.
	End Time	<i>Option disabled</i>	Important: you must show before a RFID card to start the session and the charge transaction will start at the start time.

10 TECHNICAL DATA

CCL-WBC-TOUCH-32	
AC INPUT	
AC Power supply	1P + N + PE
AC Voltage	230V _{AC} +/- 5%
Nominal input current	32A
Nominal input power	7,4kW
Frequency	50 / 60 Hz
OUTPUT	PLUG
Charge system	Mode 3
Sockets/ Plugs	Type 1 tethered cable
Lock system	No
Maximum output power	7,4kW
Maximum output current	32A
Output voltage range	230V _{AC} (1P + N + PE)
ENERGY METERS	
Accuracy class in active energy	Class 1 – EN62053-21
Meter standards	EN62052-11, EN62053-21, EN62053-23, EN61010-1
NETWORK	
Ethernet	10/100BaseTX
GENERAL	
Enclosure rating	IP54 / IK10
Enclosure material	ABS
Operating temperature	-10 to +45°C
Operating humidity	To 95% RH Non-condensing
RFID system	ISO / IEC14443A / B
Display	LCD Backlight double line text
Power limit control	Mode 3 PWM control according ISO / IEC 61851-1
Interface protocol	OCPP / XML
Net weight	3Kg
OPTIONAL DEVICES	
Mobile communications	3G / GPRS
Extended operating temperature	(Optional Heater) -30...+45°C



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